

Amendments to the Claims:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

Listing of Claims:

1.-9. (Canceled)

10. (Currently Amended) A sheathed-element glow plug for a self-igniting internal combustion engine, comprising:

a heating element projecting into a combustion chamber of the internal combustion engine;

a current feed-through via which a heating current for the heating element is fed through an opening in the combustion chamber; and

a switch positioned in the region of the current feed-through, wherein the heating current is adapted to be controlled by opening and closing the switch, wherein:

the heating element is one of a metallic and ceramic glow element;

the glow element is adapted to be fastened in the opening of the combustion chamber by use of a housing, and wherein the housing is also adapted to house the switch and the control unit; and

the switch and the control circuit are integrated on one chip.

11. (Previously Presented) The sheathed-element glow plug as recited in Claim 10, wherein a control circuit for the switch is positioned in the region of the current feed-through, and wherein the control circuit produces a signal for opening and closing the switch.

12. (Previously Presented) The sheathed-element glow plug as recited in Claim 11, further comprising a first feed line adapted to be connected to a terminal for a supply voltage for the heating current, and a second feed line connected to the control circuit for transmitting a control signal to the control circuit.

13. (Previously Presented) The sheathed-element glow plug as recited in Claim 11, further comprising an input for a line, wherein the input is connected to the switch and the control circuit, and wherein an operating voltage and a control signal for the control circuit are adapted to be simultaneously applied via the input.

14. (Previously Presented) The sheathed-element glow plug as recited in Claim 11, wherein the control circuit includes a means for determining the temperature of the heating element, and wherein the heating current is controlled as a function of a signal from said means.

15.-17. (Canceled)

18. (Currently Amended) The sheathed-element glow plug as recited in Claim [[17]] 10, wherein the chip is applied in the housing without packaging.

19. (Previously Presented) The sheathed-element glow plug as recited in Claim 10, further comprising: a housing, the heating element connectible to a ground potential of the housing.

20. (Previously Presented) The sheathed-element glow plug as recited in Claim 10, further comprising a regulator configured to adjust the heating current.

21. (Previously Presented) The sheathed-element glow plug as recited in Claim 10, wherein the switch includes a transistor.

22. (Previously Presented) The sheathed-element glow plug as recited in Claim 10, wherein the switch includes a chip connectible via one of at least one soldering element and at least one wire to at least one feed line.

23. (Previously Presented) The sheathed-element glow plug as recited in Claim 12, wherein the first feed line is adapted to be connected to the terminal in a direction facing away from the combustion chamber.

24. (Previously Presented) The sheathed-element glow plug as recited in Claim 16, wherein the housing includes a raised helical rib for a screwing, the glow element adapted to be fastened in the opening of the combustion chamber via the screwing.

25.-27. (Canceled)

28. (Currently Amended) [[The sheathed-element glow plug as recited in Claim 10,]] A sheathed-element glow plug for a self-igniting internal combustion engine, comprising:
a heating element projecting into a combustion chamber of the internal combustion engine;
a current feed-through via which a heating current for the heating element is fed through an opening in the combustion chamber; and

a switch positioned in the region of the current feed-through, wherein the heating current is adapted to be controlled by opening and closing the switch wherein the switch includes a semiconductor chip.

29. (Canceled)